



## City Research Online

### City, University of London Institutional Repository

---

**Citation:** Harding, C., Patel, K., Roche, L., Coward, N. & Meek, J. (2018). Promoting positive communication environments: a service evaluation.. Tizard Learning Disability Review, 23(4), pp. 192-200. doi: 10.1108/TLDR-04-2018-0009

This is the accepted version of the paper.

This version of the publication may differ from the final published version.

---

**Permanent repository link:** <https://openaccess.city.ac.uk/id/eprint/23695/>

**Link to published version:** <https://doi.org/10.1108/TLDR-04-2018-0009>

**Copyright:** City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

**Reuse:** Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

---

---



## Promoting positive communication environments: a service evaluation

Kunden Patel, Laura Roche, Nicola Coward, Jacqueline Meek and Celia Harding

**Abstract Purpose** – The purpose of this paper is to present an evaluation of a programme of training and support provided to staff, which aimed to encourage supported communication environments for people with learning disabilities.

**Design/methodology/approach** – Training, monitoring and support for communication, specifically augmentative and alternative communication (AAC) strategies, was provided by speech and language therapy staff to two residential services over 46 weeks. Staff and service user communications were observed pre- and post-intervention.

**Findings** – In one provision there was an increase in service user initiations and the use of some AAC strategies by support staff. In the other provision there was no change in service user initiations and a decrease in the range of AAC strategies used. It appears that some forms for AAC remain challenging for staff to implement.

**Originality/value** – This evaluation explores ways of using specialist support services to improve communication environments for people with learning difficulties. Possible reasons for differences in the outcome of the intervention are discussed. Future research into the types of communication interactions experienced by people with learning disabilities across the range of communication styles may be useful so that support staff can be better helped to provide sustained and enriched communication environments.

**Keywords:** *Learning disabilities, Community living, Training, Augmentative and alternative communication*

**Paper type:** Research paper

### Introduction

The communication skills of people with learning disabilities are varied, although many will need some form of support for their communication skills (Gillberg and Soderstrom, 2003). For people with profound and multiple learning disabilities, skills may range from pre-intentional to intentional pre-verbal abilities (Coupe-O’Kane and Goldbart, 1998). Many people with learning disabilities may need additional augmentative and alternative communication (AAC) strategies to support receptive and expressive communication and social interaction. The types of AAC used with this population may include Objects of Reference (Park, 1997), use of signs such as Makaton (Walker, 1977), natural gestures and visual supports such as symbols and pictures (Harding et al., 2011).

People with complex communication needs who use AAC have reduced social opportunities and are at risk of isolation (Goldbart and Caton, 2010). In some instances, communication partners may be uncertain as to how to use the necessary AAC strategy and may lack the necessary skills, having not had any training (Baxter et al., 2012). Confidence with using and understanding the rationale for a particular AAC approach may also influence the use of AAC (Norburn et al., 2016).

### *Supporting staff and carers to use communication strategies*

The skills and attitudes of those supporting the person with learning disabilities may influence how strategies are used in everyday contexts (Bunning et al., 2013). Graves (2007) discuss that diversity in the working context, possible values conflict between the SLT and the carer, team willingness to collaborate and support for the implementation of strategies, and SLT doubts about the value of formal communication training are factors which may influence effective intervention. Lower and Harding (2013) identified that building strong working relationships with support staff enabled understanding of values, attitudes and roles which impact on success with intervention. Communication partners and support staff need training to enable them to interact and support people with additional communication needs, in particular, people with learning disabilities (Trief, 2007). Training support staff to develop consistent communication strategies is reported as a method of improving the quality of service user – staff interactions (Owen et al., 2008). However, there is limited evidence available to support the notion that training staff improves communication; in general, support staff tend to use AAC when there is an acute need, rather than in a functional interactive way across many contexts (Rombouts et al., 2017).

Using AAC with people who have learning disabilities Support staff who support people who are AAC users often find it hard to adapt and use relevant strategies such as Makaton with modified spoken language, for example, thereby reducing the effectiveness of the recommended AAC approach (Healy and Noonan Walsh, 2007). Inconsistent use of AAC and a limited understanding of how it could improve or enable communication opportunities could lead to an AAC system being abandoned or used inconsistently (Blackstone and Berg, 2009). Communication partners need to be given a clear rationale for the method of AAC suggested, to ensure effective use and implementation of the recommended style of communication into everyday contexts (Martin and Alborz, 2014). Anecdotally, it is often assumed that provision of training for support staff working with adults with learning disabilities is effective. However, outcomes from such studies are varied and cultural and motivational factors are difficult to quantify (Iacono et al., 2018).

### *An inner- city service evaluation*

This paper presents an inner- city learning disability partnership team's project aimed at improving communication support for people with learning disabilities. Speech and language therapy intervention had been provided on an individual session basis with an agreed number of sessions for the key worker, adult with learning disabilities and SLT to work together. The Supporting Teams to Adopt Recommended Strategies (STARS) project was developed as a method of addressing the need to improve communication environments by changing the way communication intervention by the SLT members of the team was currently provided. It also aimed to address the roles highlighted in the National Learning Disability Senate (2015) report, specifically enabling others to be effective in the communication support they were offering, and being able to provide specialist therapeutic support to enhance communication opportunities for people with learning disabilities in their everyday environments. The emphasis of this intervention was specifically providing training and ongoing support for staff supporting service users in their residential homes (rather than to family members) as it had been recognised that staff need to develop confidence and skills in using AAC. The STARS project adopted the Royal College of Speech and Language Therapists (2013) five communication standards for support staff to work towards when working with the residents. These communication standards are:

- there is a detailed description of how best to communicate with individuals;

- services demonstrate how they support individuals with communication needs to be involved with decisions about their care and their services;
- staff value and competently use the best approaches to communicate with each individual they support;
- services create opportunities, relationships and environments that make individuals want to communicate; and
- individuals are supported to understand and express their needs in relation to their health and wellbeing.

STARS aimed to support staff to implement communication interventions including use of AAC. Support to implement interventions was offered not just during the initial training (as in previous interventions) but throughout the 46 weeks, supporting staff to gain confidence with using various AAC strategies to interact with service users. The intervention initially focussed on two residential homes; one with four residents with profound and severe learning disabilities (Provision A), and another for four residents with moderate learning disabilities (Provision B). The speech and language therapy team provided specialist advice working directly alongside staff to support them to implement a range of different AAC strategies. It was predicted that by undertaking the STARS project as a joint intensive intervention, communication environments for people with learning disabilities would be improved.

## Method

### *Study design*

Phase 1 (weeks 0–4) of the project included:

1. Agreeing project commitments with staff, (i.e. that the main focus of the project was to provide staff support and training).
2. Person-centred goal planning for the service users of both provisions with the managers and staff of both residences.
3. Identification of staff strengths and areas of development needs. If a service user in either provision was not known to the SLT team, then an assessment and observation of communication skills and interactive style was completed.

Phase 2 (weeks 4–10) involved training staff about AAC use to support both receptive and expressive language and the diversity of communication styles used, both by people with learning disabilities generally and by service users in that setting. Therapists also provided staff with support, and resources and templates for visual materials such as timetables, symbols, etc. Training was provided in specific two-hour workshops as well as direct support within the home. Direct support in the home included modelling specific strategies, observing service users and supporting staff to use the AAC resources confidently.

Phase 3 (weeks 10–14) involved staff receiving ongoing training in providing a total communication environment, meetings with staff to discuss progress and problems, and the instigation of a positive interaction communication board where successful interactions were celebrated. Makaton training was offered once a fortnight. Phase 4 (weeks 14–18) involved long distance support through phone consultations as requested by the home. Mid-way observations of service user progress were also carried out. For Phase 5 (weeks 18–24) staff did not receive any therapy input directly, but could

contact the team to discuss issues relating to communication, or to request a visit as necessary. Phase 6 took place between weeks 24–42. This involved further service user observations, with direct input offered if staff requested support. Phase 7 involved the final evaluation of the project. Outcomes were assessed through observations of service users and staff during breakfast and lunch times. These times were chosen as it was felt that service users would be home and available to be observed.

### *Participants*

Participants in this service evaluation were service users and support staff. There were four service users with profound and severe disabilities (Provision A), and four service users with moderate learning disabilities (Provision B). The service users in Provision A were aged between 55–79 years. Two service users were non-verbal and two service users had very limited verbal skills. The service users in Provision B were aged between 47–72 years. One service user was non-verbal, one service user had very limited verbal skills and two service users were verbal. Both provisions took part in the project as they had requested additional support from services. Staff in Provision A were reported as being a newly formed team. Provision B had a more established staff group.

### *Data*

Data were collected through use of observations of service users and staff. Observations included the number of service user initiation of communication attempts, staff initiation of communication with service users, and the number of responses or misses by staff to service user communication initiations. These were recorded in separate 15 - minute observation slots per service user completed by an SLT or an SLT assistant. Observations of service users and staff were completed before the programme, mid-way through the programme and at the end of the programme. As part of the service evaluation, staff were also asked to informally comment on their confidence with using AAC to facilitate communication with the service users they supported.

### *Ethics*

This study was a service evaluation designed to investigate a collaborative approach to supporting staff to improve communication environments and interactions for people with learning disabilities. Staff were informed that the service evaluation was part of a service improvement project. The study design met the criteria of a service evaluation using the Health Research Authority decision tool.

## **Results**

### *Service user initiation attempts*

For provision A, there were an average of 28 initiations pre- STARS increasing to an average of 41 initiations mid-way and to an average of 77 initiation attempts at the end. In Provision B, there were an average of 50 initiations pre - STARS, 43 initiation attempts mid-way and 50 initiations at the end (Figure 1).

### *Interaction events initiated by support staff*

For Provision A, there were an average of 50 initiation from all service users pre - STARS, 43 initiation attempts mid-way and 50 initiation attempts at the end. For provision B there were an average of 23 initiations pre - STARS, 31 attempts mid-way and 18 initiation attempts at the end.

### *Number of service user initiations missed by support staff*

In provision A there were an average of 12 missed service user initiations pre – STARS, 17 mid-way and 18 at the end. Provision B staff missed an average of 19 service user initiations pre - STARS, 9 mid-way and 13 at the end.

#### *Pre-mid-way and post-intervention range of communication strategies used by staff*

In provision A, Staff increased their use of verbal interaction, Objects of Reference, touch and gestures (Figure 2). They reduced use of Makaton, eye contact, body language and facial expression. None of the staff used visual aids (pictures /symbols), communication passports or visual stories. In provision B, Overall, there were decreases in use of all but one strategy by the end of the service evaluation period. During the mid-way service evaluation, there were increases in use of Makaton, verbal language and gestures, but these increases were not sustained by the end of the 46-week period (though Makaton use was slightly higher at the end of the intervention).

Staff confidence in using AAC Staff completed a pre- and post-STARS confidence scale in the use of AAC Provision A. Staff had low confidence in using Makaton, both before the intervention started, and throughout the duration of the STARS project. Some staff had not used Makaton in previous roles or were unsure of specific Makaton signs. Staff reported awareness of other communication strategies such as gesture, Objects of Reference, etc., and also commented that they felt more confident about using AAC post the STARS intervention. Staff elected a Makaton champion to motivate staff to use Makaton with service users and to be a resource if unsure of a sign. Use of verbal support, Objects of Reference, touch and natural gestures increased during the intervention. However, eye contact, body language and facial expression decreased. There was no observed use of visual aids, visual stories or communication passports. Provision B. Pre - STARS, staff reported that they felt confident in using visual timetables, communication passports and visual stories but this was not observed in practice, with no use of visual supports observed at all. They felt less confident with using Makaton, although use increased mid-way, and then decreased. Post the service evaluation, staff reported that they continued to feel confident in communicating with their service users. Despite an increase in service user Makaton use, staff did not increase their use of Makaton.

#### **Discussion**

The purpose of this service evaluation was to review a targeted training approach provided by speech and language therapists to improve communication environments by providing intervention to support staff. This training and subsequent support over 46 weeks was provided in two residential provisions (Provision A and Provision B) in an inner - city area.

The service users in each provision differed. Those in Provision A had more profound and severe needs, whereas those in Provision B had more moderate needs. There was an increase in service user initiations in Provision A, but no change in Provision B. Staff in Provision A initiated more communication with service users, compared to Provision B. In fact, in Provision B, the number of staff initiations decreased over the 46- week period. It was noted that the staff in Provision A were new, and were learning to work together as a team, as well as getting used to the service users. This could be one factor which contributed to an increase in initiations from service users as staff became more familiar with their methods of communicating. It could be that the service users had a greater repertoire of communication skills in Provision B, so therefore, staff did not need to initiate communication opportunities in comparison to Provision A.

Service users in Provision A required greater support to create communication opportunities within their everyday environment meaning that staff needed to have a clear recognition of each individual's

unique communication style. However, as communication attempts by service users were missed by staff, it is possible that each individual's communication style were not consistently recognised by all staff. It is also possible that the greater demands of physical care might inhibit opportunities to identify more subtle communication signs (Bunning et al., 2013). However, within Provision A although the number of missed communication attempts rose, there was also an increase in service user initiations.

Surprisingly, communication attempts were missed within Provision B, which given that the service users had a higher level of communication competence, would not be anticipated. Further investigations that explore the nature of the communication interactions that take place may help to understand the dynamic that is occurring in these contexts.

The range of AAC strategies used both initially and by the end of the service evaluation varied. In Provision A, a decrease was seen in use of facial expression, body language, eye contact and Makaton. Increases were seen with use of verbal language, Objects of Reference (Park, 1997), touch and use of gestures. Interestingly, no one was observed using visual supports such as visual stories. It was noted that Intensive Interaction (Nind and Hewett, 2001) was used as a communication approach during observations in Provision B when staff were attempting engage with service users, but not Provision A. In previous training, support workers had been encouraged to use Intensive Interaction to engage with a service user who might be experiencing difficulties initiating interaction. Typically, Intensive Interaction (Nind and Hewett, 2001) is used with those service users who have more complex, profound and multiple needs, and it would be interesting to explore with support staff in Provision A whether the strategies they typically used on a daily basis were more functional. It may be that a key worker who uses an approach such as Intensive Interaction with a service user with complex communication needs could feel that they are gaining a more positive engagement in comparison to when attempting to use specific AAC strategies. Similarly, use of visual timetables for service users in Provision A might have been too difficult. Both provisions found Makaton hard to use, and both were seen to have varied use of Makaton despite the use of a Makaton Champion to support staff within each site. Difficulties in using Makaton have been found in previous studies (Healy and Noonan Walsh, 2007). Interestingly, a decrease was noted in a wide range of strategies in Provision B. There is not enough evidence from this service evaluation to speculate as to why some forms of AAC are more challenging than others. However, further investigations are warranted which could investigate whether some types of AAC are harder to use than others.

There are a number of limitations to this evaluation. The number of service users observed was very small and the observations were conducted in small 15min slots and at different times. Context of the observations was not recorded. Observations over a wider range of situations and for longer periods of time would have been helpful. In addition, it was not possible to complete reliability checks on the observations made. Future studies would need to include more exploration of appropriate observations to make, specific training on categories to be observed and reliability of these tested. It would also have been useful to have gained more insight into the staff group motivations and expectations of the service evaluation. This would contribute to our understanding of how best to support staff in residential settings and how to use the small resource learning disability services have to most effect.

## **Conclusion**

People with learning disabilities, specifically those with more profound needs are highly dependent on those who work with them to access systems (Harding et al., 2011). This service evaluation found that providing ongoing monitoring and support for staff who care for people with learning



disabilities in their residential settings through use of the STARS approach did not enable support staff to provide a consistent communication environment. Data was not collected on factors such as work place culture, resources and impact of leadership or management. Future studies should investigate these factors in more depth, in relation to identifying whether particular factors would enable support staff to implement and maintain AAC. Further exploration of support staff understanding of the rationales underpinning communication strategies would be useful and may help to understand why some AAC strategies are more readily used than others.

## References

Baxter, S., Enderby, P., Evans, P., & Judge, S. (2012), "Barriers and facilitators to the use of high-technology augmentative and alternative communication devices: a systematic review and qualitative synthesis", *International Journal of Language & Communication Disorders*, Vol. 47, No. 2, pp. 115-129.

Blackstone, S. W., & Berg, M. H. (2009), "Social networks: A communication inventory for individuals with complex communication needs and their communication partners", *Monterey, CA: Augmentative Communication Inc.*

Bunning, K. (2011), "Let me speak – facilitating communication", in Atherton, H.L. and Crickmore, D.J. (Eds.), *Learning Disabilities: Towards Inclusion*, 6<sup>th</sup> Edition, Elsevier Ltd, London, pp. 91-12.

Bunning, K., Smith, C., Kennedy, P., & Greenham, C. (2013). Examination of the communication interface between students with severe to profound and multiple intellectual disability and educational staff during structured teaching sessions. *Journal of Intellectual Disability Research*, 57(1), 39-52.

Coupe-O'Kane, J. & Goldbart, J. (Eds.). (1988), "Communication before speech: normal development and impaired communication", *Routledge*.

Dalton, C. & Sweeney, J. (2013), "Communication supports in residential services for people with an intellectual disability", *British Journal of Learning Disabilities*, Vol. 41 No.1, pp. 22-30.

Gillberg, C. and Soderstrom, H. (2003), "Learning disability", *Lancet*, Vol. 362, pp. 811-21.

Goldbart, J. & Caton, S. (2010), "Communication and People with the Most Complex Needs: what works and why this is essential". *Manchester: Mencap*.

Graves, J. (2007), "Factors influencing indirect speech and language therapy interventions for adults with learning disabilities: the perceptions of carers and therapists", *International journal of language & communication disorders*, Vol.42 No.1 (Supp), pp. 103-121.

Harding, C, Lindsay, G, O'Brien, A, Dipper, L. & Wright, J. (2011), "Implementing AAC with children with profound and multiple learning disabilities: a study in rationale underpinning intervention". *Journal of research in special educational needs*, Vol.11 No.2, pp. 120-129.

Healy, D. & Noonan Walsh, P. (2007) "Communication among nurses and adults with severe and profound intellectual disabilities", *Journal of Intellectual Disabilities*, 11, pp.127–141.

Iacono T, Bould E, Beadle-Brown J, Bigby C.(2018)" An exploration of communication within active support for adults with high and low support needs", *Journal of Applied Research in Intellectual Disabilities*, 31, pp.e182-e200.

Lewer, A., & Harding, C. (2013), "From "what do you do?" to "a leap of faith": developing more effective indirect intervention for adults with learning disabilities", *Tizard Learning Disability Review*, Vol. 18 No.2, pp. 74-83.

Mander, C. (2015) "First-hand experience of accessible information", *Tizard Learning Disability Review*, Vol. 20 Issue: 2, pp.80-87, <https://doi.org/10.1108/TLDR-07-2014-0022>

Mansell, J., Beadle-Brown, J., Whelton, B., Beckett, C. & Hutchinson, A. (2008), “Effect of service structure and organization on staff care practices in small community homes for people with intellectual disabilities”. *Journal of Applied Research in Intellectual Disabilities*, Vol.21 No.5, pp. 398-413.

Martin, T. & Alborz, A. (2014) ‘Supporting the education of pupils with profound intellectual and multiple disabilities: the views of teaching assistants regarding their own learning and development needs’, *British Journal of Special Education*, 41 (3), pp. 309–327.

National Learning Disability Senate (2015), “Delivering Effective Specialist Community Learning Disabilities Health Team Support to People with Learning Disabilities and their Families or Carers”, *National Learning Disability Senate*.

Nind, M. & Hewett, D. (2001), “A practical guide to intensive interaction”. *British Institute of Learning Disabilities*.

Norburn, K., Levin, A., Morgan, S & Harding, C. (2016), “A survey of augmentative and alternative communication used in an inner city special school”. *British Journal of Special Education*, Vol. 43 No.3, pp. 289-306.

Owen, K., Hubert, J., & Hollins, S. (2008). Moving Home: The Experiences of Women with Severe Intellectual Disabilities in Transition from a Locked Ward. *British Journal of Learning Disabilities*, 36(4), 220-226.

Park, K. (1997), “How do Objects become Objects of Reference?” *British Journal of Special Education*, Vol.24 No.3, pp. 108-114.

Rombouts, E, Maes, B, & Zink, I (2017) “The behavioural process underlying augmentative and alternative communication usage in direct support staff”, *Journal Of Intellectual & Developmental Disability*, 42, 2, pp. 101-113

Siu, E., Tam, E., Sin, D., Ng, C., Lam, E., Chui, M. & Lam, C. (2010) “A survey of augmentative and alternative communication service provision in Hong Kong”, *Augmentative and Alternative Communication*, 26 (4), pp. 289–298.

Tam, E., Mak, A. F., Chow, D., Wong, C., Kam, A., Luk, L. & Yuen, P. (2003) “A survey on the need and funding for assistive technology devices and services in Hong Kong”, *Journal of Disability Policy Studies*, 14 (3), pp. 136–141.

Trief, E. (2007) “Research report: the use of tangible cues for children with multiple disabilities and visual impairments”, *Journal of Visual Impairment and Blindness*, 10 (10), pp. 613–619.

Walker, M. (1977), “Teaching sign language to deaf mentally handicapped adults”. *Language and the Mentally Handicapped*, Vol.3, pp. 3-25.

Weiss, P., L., Seligman-Wine, J., Lebel, T., Arzi, N. & Yalon-Chamovitz, S. (2005) “A demographic survey of children and adolescents with complex communication needs in Israel”, *Augmentative and Alternative Communication*, 21 (1), pp. 56–66.

Figure 1

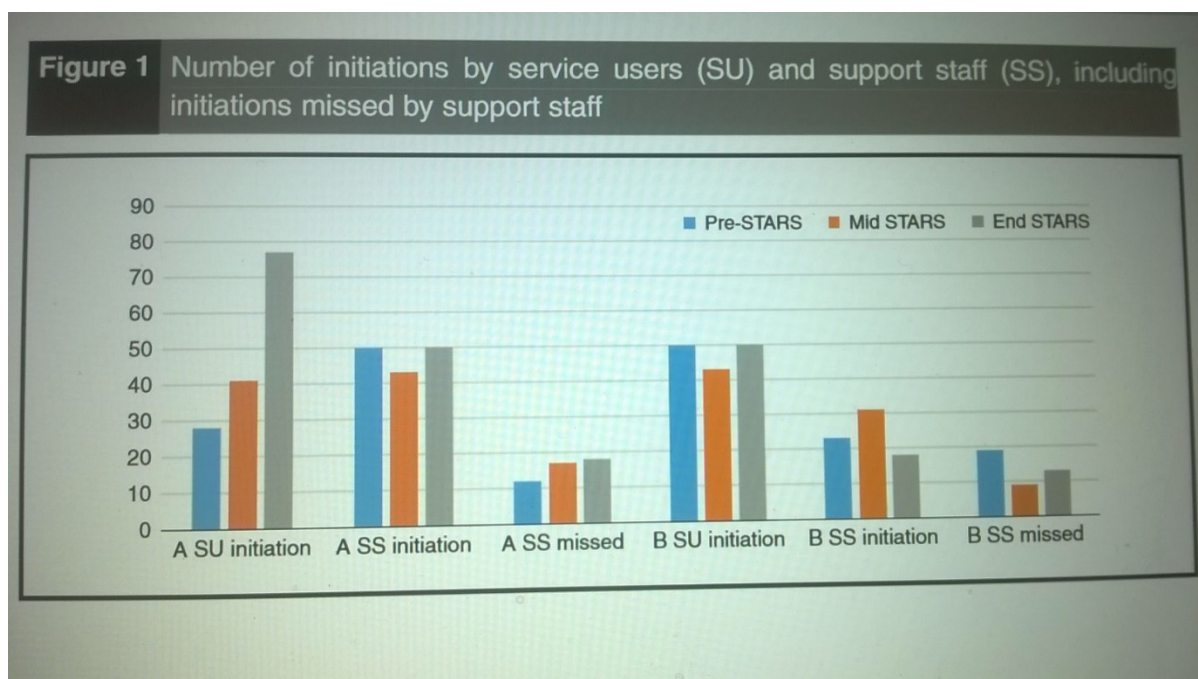
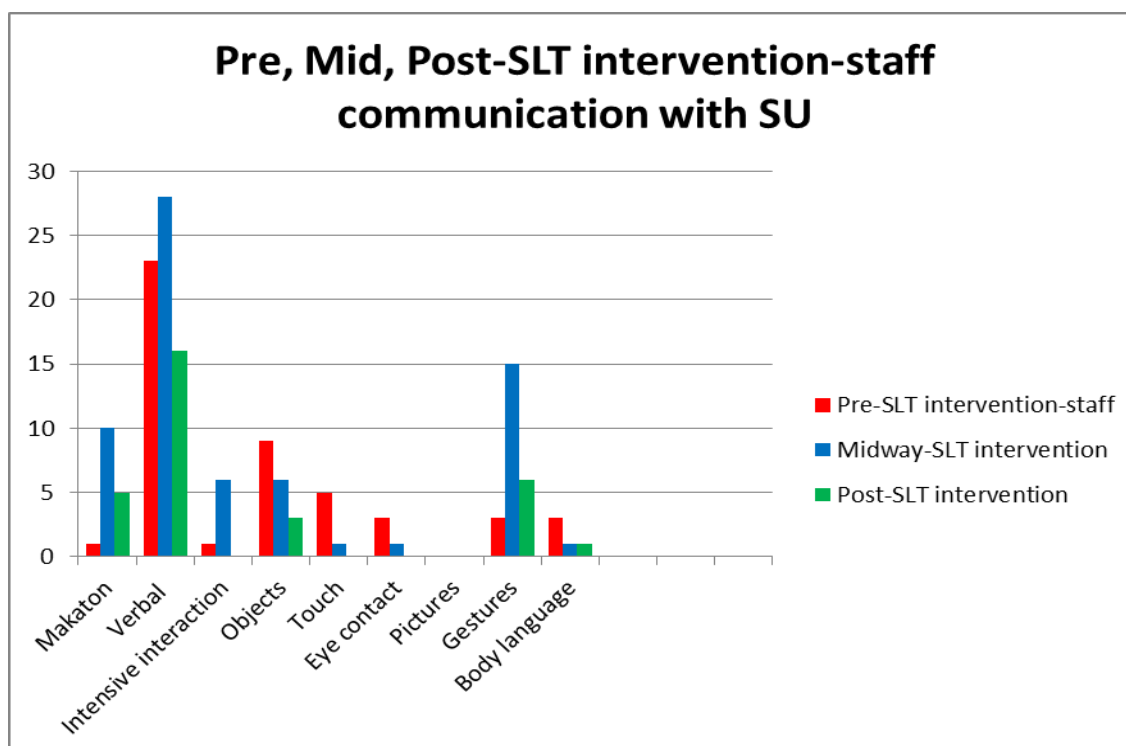


Figure 2

Provision A



## Provision B

